Army Blood Program Briefing for the Annual Meeting of the American Association of Blood Banks

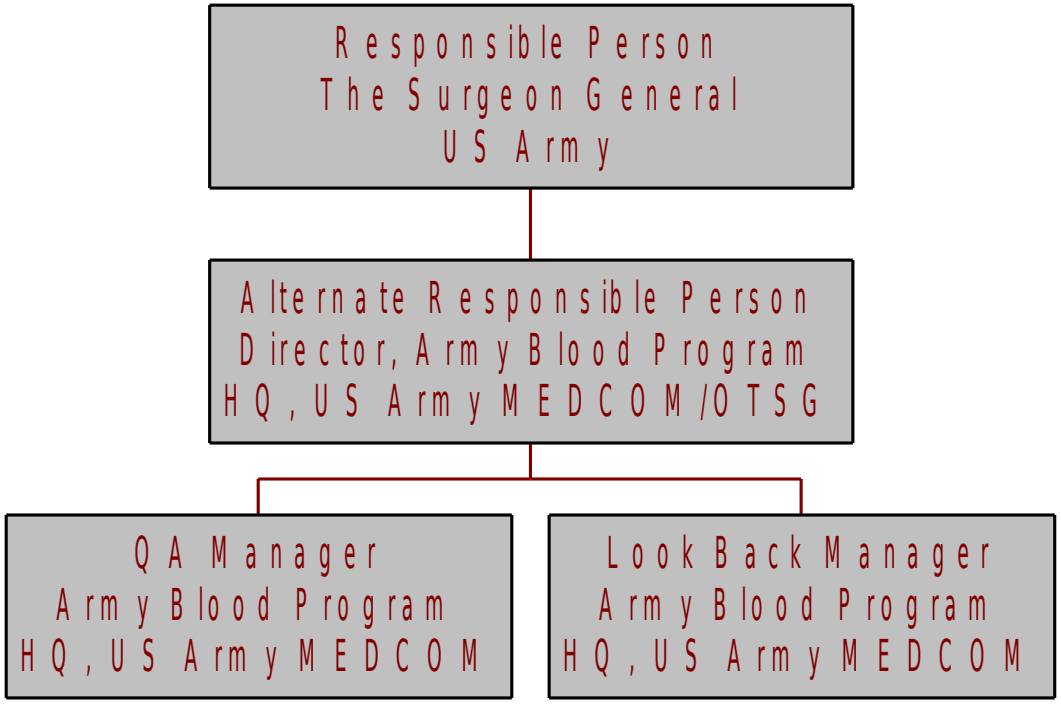
26-29 October 2002

Director, Army Blood Program

AGENDA

- **Army Blood Program Organizational and Regulatory Structures**
- **Impact of vCJD Deferral Policy on Army Blood Collections**
- **Army Blood Support for Operation Enduring Freedom and Future Contingencies**
- **Military Frozen Blood Modernization Plan**

ARMY BLOOD PROGRAM
ORGANIZATION & REGULATORY STRUCTURES



ARMY BLOOD PROGRAM ORGANIZATION & REGULATORY STRUCTURES

14 FDA Registered Facilities

Dewitt ACH, Fort Belvoir, VA
Winn ACH, Fort Stewart, GA
Banchfield ACH, Fort Campbell, KY
McDonald ACH, Fort Eustis, VA
67th CSH , Wuerzburg, Germany
95th CSH, Heidelberg, Germany
Darnall ACH, Fort Hood, TX
Weed ACH, Fort Irwin, CA
Ireland ACH, Fort Knox, KY
121st Gen Hospital, Yongsan, Korea
Landstuhl RMC, Landstuhl, Germany
Madigan AMC, Fort Lewis, WA
Reynolds ACH, Fort Sill, OK
Lyster ACH, Fort Rucker, Al

ARMY BLOOD PROGRAM ORGANIZATION & REGULATORY STRUCTURES

19 FDA Licensed Facilities

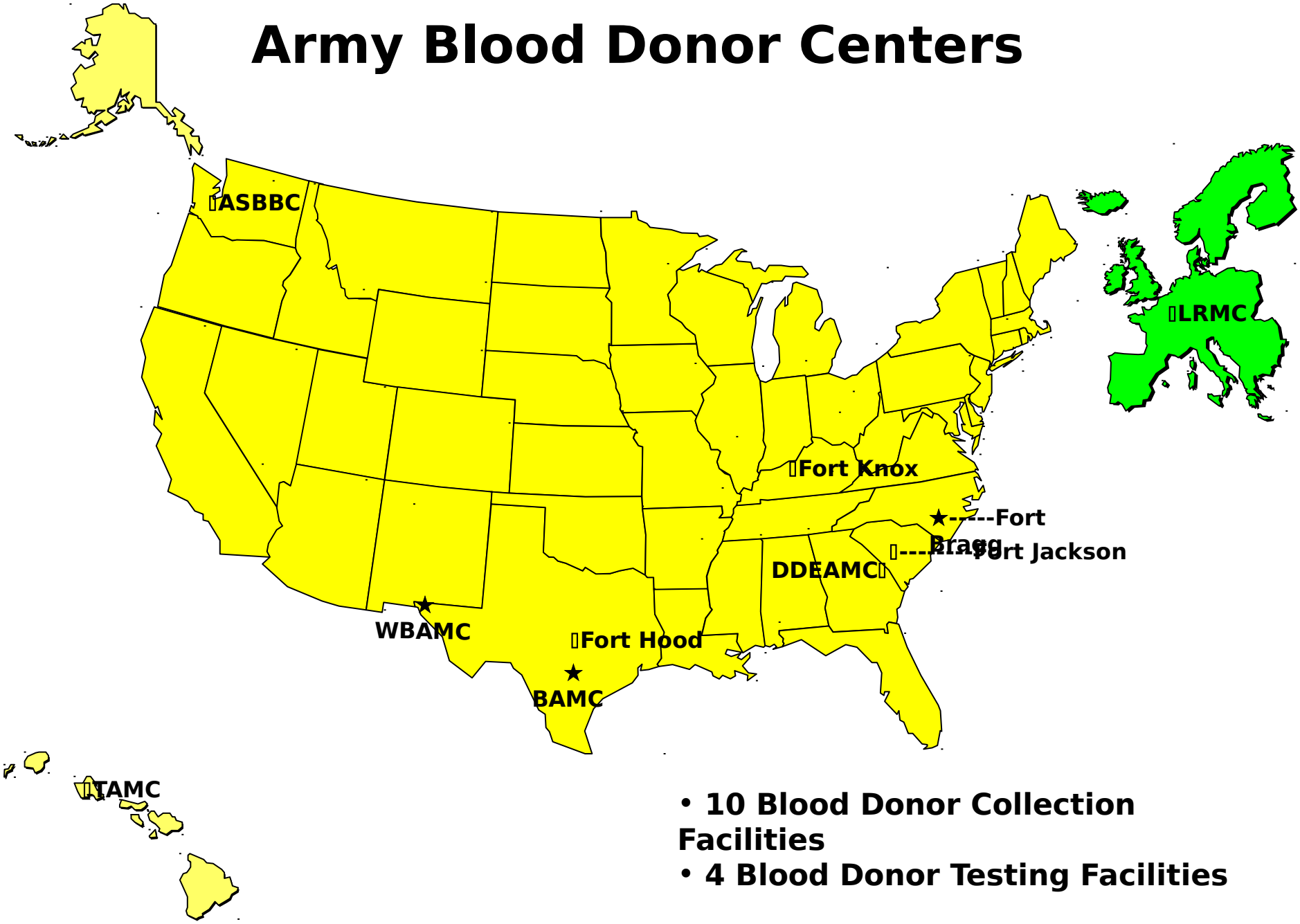
- Basset ACH, Fort Wainwright, Alaska
- Bayne-Jones ACH, Fort Polk, Louisiana
- Brooke AMC, Fort Sam Houston, Texas
- Dwight David Eisenhower AMC, Fort Gordon, Georgia
- Evans ACH, Fort Carson, Colorado
- Frank R Camp Memorial Blood Center, Fort Knox, Kentucky
- General Leonard Wood ACH, Fort Leonard Word, Missouri
- Irwin ACH, Fort Riley, Kansas
- Armed Services Blood Bank Center, Tacoma, Washington
- Martin ACH, Fort Benning, Georgia
- Montcrief ACH, Fort Jackson, South Carolina
- Tripler AMC, Honolulu, Hawaii

19 FDA Licensed Facilities - Continued

- Keller ACH, West Point, New York
- USAREUR Blood Donor Center, Landstuhl, Germany
- USFK Blood Donor Center, Seoul, Korea
- Walter Reed AMC, Washington, District of Columbia
- William Beaumont AMC, El Paso, Texas
- Womack AMC, Fort Bragg, North Carolina

- Facilities currently collecting

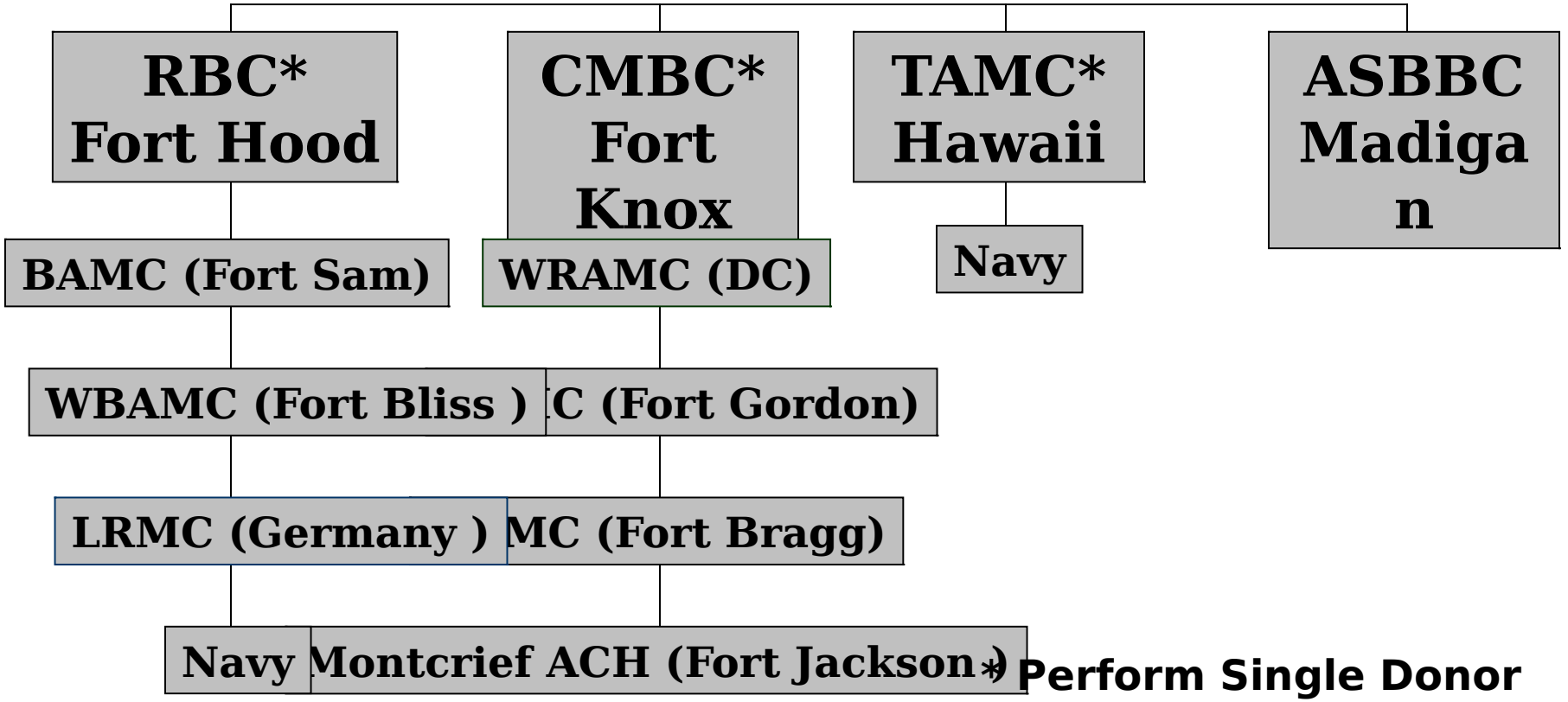
Army Blood Donor Centers



- 10 Blood Donor Collection Facilities
- 4 Blood Donor Testing Facilities

ARMY BLOOD PROGRAM ORGANIZATION & REGULATORY STRUCTURES

Blood Donor Testing Facilities



* Perform Single Donor HIV/HCV testing under an IND protocol

ARMY BLOOD PROGRAM ORGANIZATION & REGULATORY STRUCTURES

- **Army Regional Medical Command (RMC) Blood Bank Managers:**
  - ➢ **Regional consultants for technical and operational blood donor center and transfusion service issues**
  - **Conduct annual quality audits of the blood donor centers and transfusion services within their RMC and SAVs of RC blood donor centers**

Quality Audits

- **RMC Blood Managers conduct annual quality audits of blood establishments within their region.**
- **Army Blood Program Office (ABPO) conducts periodic and / or ad hoc quality audits of the MEDCEN BDCs, overseas blood establishments, and 4 centralized donor testing facilities.**

IMPACT OF vCJD DEFERRAL POLICY ON ARMY BLOOD COLLECTIONS

- Army implemented Department of Defense policy on variant Cruetzfeldt-Jacob Disease (vCJD) on 29 October 2001.

- Impact of vCJD deferral policy appears most severe at Army installations with large Active Duty populations comprised predominantly of older soldiers.

IMPACT OF vCJD DEFERRAL POLICY ON ARMY BLOOD COLLECTIONS

- **Some Army installations have experienced total donor deferral rates ranging as high as 30 – 56 %.**
  - ➢ vCJD: 12 – 22 %*
  - Tattoos / body piercing: 10 – 19 %
  - Malaria (Korea): 8 – 15%
- **To offset losses due to deferrals, Army donor centers are primarily increasing blood collections from trainees at military installations.**

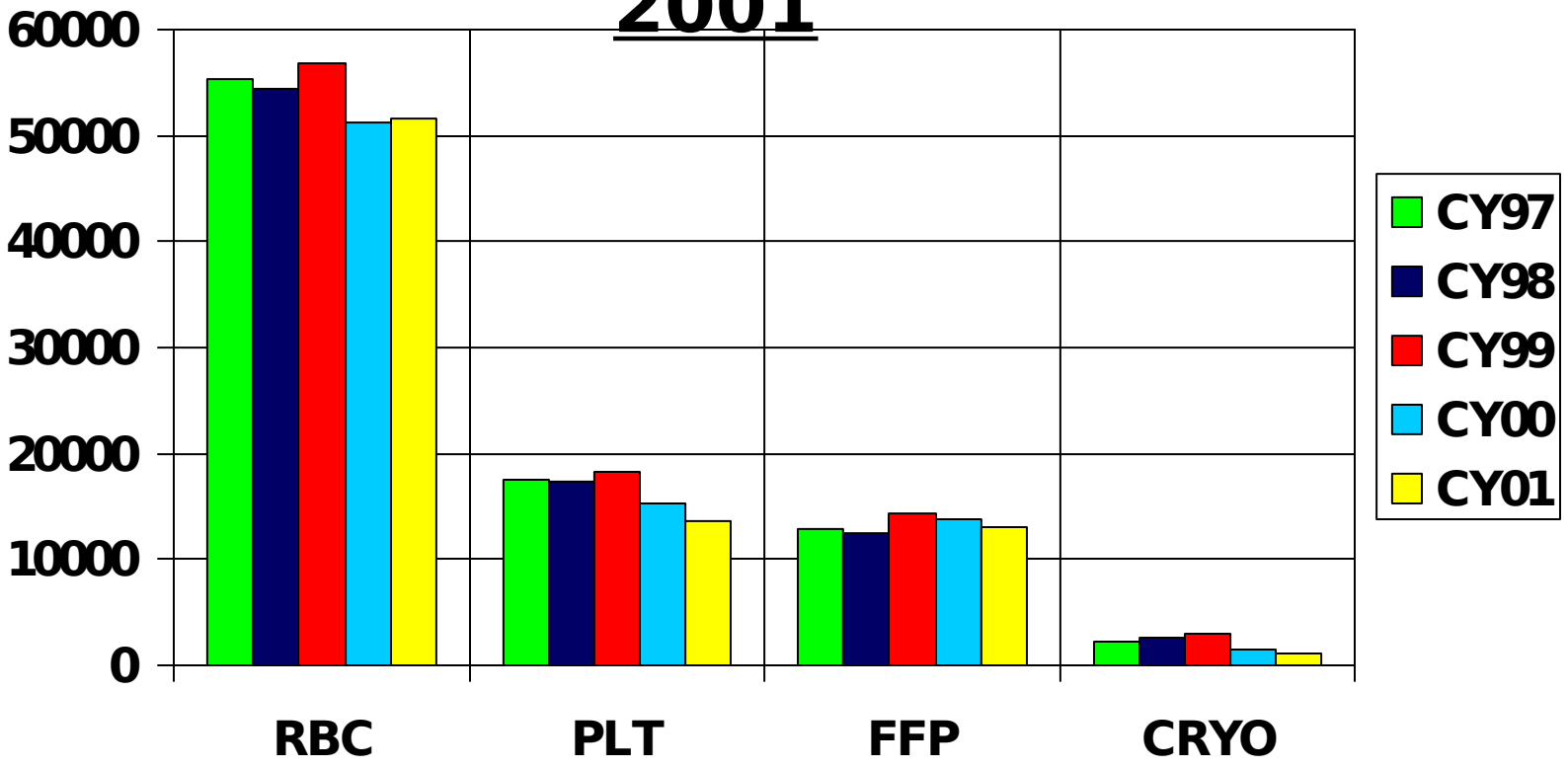
*** DoD policy estimated 18% vCJD deferral rate**

IMPACT OF vCJD DEFERRAL POLICY ON ARMY BLOOD COLLECTIONS

- **Future challenge will be to increase collections in conjunction with possible large-scale military deployments that will further deplete eligible military donor populations.**

IMPACT OF vCJD DEFERRAL POLICY ON ARMY BLOOD COLLECTIONS

Army Blood Collections CY1997 ~ 2001



Army Blood Support for Operation Enduring Freedom and Future Contingencies

- **Contingency shipments of blood to support Operation Enduring Freedom (OEF) increased significantly in October 2001.**
  - ➢**Services contingency blood quotas doubled:**
    - **Weekly contingency blood quotas for all Services increased to 500 units of PRBCs/week**
    - **Weekly contingency blood quotas for Army is 242 units of PRBCs/week (50% of total contingency requirement for all Services)**

Army Blood Support for Operation Enduring Freedom and Future Contingencies

- **AC Army BDCs are operating near maximum capacity to meet current OEF and peacetime blood requirements without additional personnel.**
- **To meet any significant increase in blood requirements for OEF or any future contingencies, Army BDCs would require personnel augmentation.**

Army Blood Support for Operation Enduring Freedom and Future Contingencies

- **During contingencies or wartime, Army Reserve Component (RC) blood donor centers (BDCs) may be activated and deployed to augment Army Active Component (AC) BDCs.**
  - **13 Army RC BDCs throughout CONUS aligned to our 10 AC Army BDCs and 2 ASWBPLs to augment them during contingencies**

Army Blood Support for Operation Enduring Freedom and Future Contingencies

Current RC BDCs and Alignment with AC BDCs

RC Unit Name	RC Unit Location	AC Unit Aligned	Total Personnel
1. 7227 MSU BDC	Columbia, MO	Fort Hood, TX	24 Total: 2 Off, 22 Enl
2. 7233 MSU BDC	Tuskegee, AL	Fort Hood, TX	44 Total: 4 Off, 40 Enl
3. 7218 MSU BDC	Louisville, KY	Fort Knox, KY	44 Total: 4 Off, 40 Enl
4. 5501 MSU BDC	San Antonio, TX	Fort Sam Houston, TX	24 Total: 2 Off, 22 Enl
5. 7236 MSU BDC*	Durham, NC	Fort Bragg, NC	24 Total: 2 Off, 22 Enl
6. 7217 MSU BDC	Perrine, FL	Fort Gordon, GA	24 Total: 2 Off, 22 Enl
7. 4223 MSU BDC	Omaha, NE	Fort Bliss, TX	24 Total: 2 Off, 22 Enl
8. 7220 MSU BDC	Tucson, AZ	Fort Sill, OK	35 Total: 3 Off, 32 Enl
9. 7226 MSUBDC	Fort Jackson, SC	Fort Jackson, SC	24 Total: 2 Off, 22 Enl
10. 4219 MSU	Picatinny Arsenal,	WRAMC/ASBBC-NCR	24 Total: 2 Off, 22

Army Blood Support for Operation Enduring Freedom and Future Contingencies

- **Any significant increase in blood requirements for OEF will require RC BDC activation/deployment to augment AC BDCs.**
- **Challenges/Concerns related to RC BDC activation/deployment:**
  - **Significant training requirement as staffing of most RC BDCs is very low prior to activation / deployment**

Army Blood Support for Operation Enduring Freedom and Future Contingencies

- **Maintenance of cGMPs and regulatory compliance of BDC operations with RC personnel**
- **Increased funding required for supplies, civilian overtime, and travel**

Army Blood Support for Operation Enduring Freedom and Future Contingencies

Deployable Field Blood Units

- **Currently, blood support to OEF provided by portions of an Army AC Blood Bank Platoon in the Central Command (CENTCOM) area of operations.**
- **Deployments in support of any future contingency operations will likely use Army RC Blood Bank Platoons.**

Army Blood Support for Operation Enduring Freedom and Future Contingencies

- **Concerns with RC Blood Bank Platoons that may support future contingencies.**
  - **low staffing**
  - **significant training required before deployment**

Army Blood Support for Operation Enduring Freedom and Future Contingencies

- **Conversion of next generation deployable field Blood Bank Units:**
  - ➢ **Most current AC / RC field Blood Bank units will be converted to the next generation Detachments**
  - **Total of 9 next generation Blood Support Detachments after conversion (4 AC/ 5 RC)**
  - **440th BSD* activated early due to recent deployment to CENTCOM AO**

Army Blood Support for Operation Enduring Freedom and Future Contingencies

Blood Support Detachment Conversion Schedule

SRC	Number	UIC	ULCCC	UNTDS	Location	State	Assign	Conversion Date	Conversion To	Inactivation Date
08485L000	32	WBHVAA	BN	MED LOG BN (FWD)	FT BRAGG	1NC	FC	9/30/2008	08496A000	
08485L000	226	WHLRAA	BN	MED LOG BN (FWD)	PIRMASENS	GM	E5	9/30/2008	08496A000	
08485L000	172	WZKCAA	BN	MED LOG BN (FWD)	OGDEN	5UT	AR	9/30/2008	08496A000	
08485L000	388	WSAYAA	BN	MED LOG BN (FWD)	HAYS	5KS	AR	9/30/2008	08496A000	
08485L000	427	WZK2AA	BN	MED LOG BN (FWD)	FOREST PA	1GA	AR	9/30/2008	08496A000	
08695L000	16	WBHUAA	BN	MED LOG BN (REAR)	YONG SAN	KS	P8	9/30/2008	08496A000	
08695L000	147	WG43AA	BN	MED LOG BN (REAR)	FT SAM HO	5TX	FC			6/15/02 **
08695L000	145	WVFJAA	BN	MED LOG BN (REAR)	SEAGOVILL	5TX	AR	9/16/2003	08496A000	
08695L000	424	WSAXAA	BN	MED LOG BN (REAR)	PEDRICKTO	1NJ	AR	9/30/2008	08496A000	
08897L000	6	WDCYAA	DET	TMMMC	FT DETRIC	1MD	FC			10/15/00
08909L000	49	WBSNAA	DET	MED LOG SPT DET	FT HOOD	5TX	FC			10/15/01
08909L000	448	WSERAA	DET	MED LOG SPT DET	FT DES MO	5IA	AR			9/30/08
08909L000	482	WSFRAA	DET	MED LOG SPT DET	MILWAUKEE	1WI	AR			9/30/08
08909L000	484	WVDQAA	DET	MED LOG SPT DET	KALAMAZOO	1MI	AR			9/30/08
08909L000	1880	WZK4AA	DET	MED LOG SPT DET	ST LOUIS	5MO	AR			9/30/08
08489A000	440	WFQSAA	DET	BLOOD SUPPORT DET	FT SAM HO	5TX	FC	6/16/02 **	A	

Military Frozen Blood Modernization Plan

- **Will address need to replace outdating and partially tested frozen blood that is pre-positioned overseas for contingency purposes.**
- **7-year replacement plan:**
  - **Rotated every 7 years to minimize need for testing frozen specimens when new tests are required**

Military Frozen Blood Modernization Plan

- **Frozen red blood cells are currently licensed for storage up to 10 years.**
- **Total worldwide inventory of pre-positioned frozen blood: 57,053.**
- **Total worldwide contingency requirement: 56,100.**
- **Expiration status as of 23 July 2002:**
  - **In-date (<10 y/o) = 20,555 (36%)**
  - **Expired (>10 y/o but < 21 y/o) = 36,498 (64%)**

Military Frozen Blood Modernization Plan

- **51% tested for HIV-1 p24 antigen**
- **49% untested for HIV-1 p24 antigen, but appropriately labeled**
- **100% untested for NAT HIV/HCV**

Military Frozen Blood Modernization Plan

- **Total Service requirement to collect/test 200 units/week (Army – 70; Navy – 70; Air Force – 60).**
- **Services would collect blood in 800 ml freezing bag or contract with civilian agencies to collect requirement.**
- **Air Force would freeze blood at ASWBPL(s).**
- **Expected start date Jan 03 or later.**

Military Frozen Blood Modernization Plan

- **In order to increase collections to support implementation of the Frozen Blood Modernization Plan, select Army sites will receive additional contract recruiters and phlebotomists.**

Military Frozen Blood Modernization Plan

FY03 Central Contract for BDC Contract Personnel*

Facility	# Phlebotomists	# Recruiters
1. BAMC	4	1
2. EAMC	8	1
3. WBAMC	6	1
4. WAMC	4	1
5. Fort Hood	5	1
6. Fort Knox	5	0
7. ASSBC-PNW	4	1
8. LRMC	5	1
9. Tripler	4	1
Total	45	8

*Contract personnel will be used to increase blood outputs at BDCs